Specifications — ISS 108, ISS 408 Seamless Switchers

Video input

Number/signal type	8 RGBHV, RGBS, RGsB, RGBcvS, component video, S-video, composite video
Connectors	8 x 5 female BNC
Nominal level	1 Vp-p for Y of component video and S-video, and for composite video 0.7 Vp-p for RGB 0.3V Vp-p for R-Y and B-Y of component video, and for C of S-video
Minimum/maximum levels	0 V to 1.0 Vp-p with no offset
Impedance	75 ohms
Horizontal frequency	
ISS 108	Autoscan 15 kHz to 85 kHz (RGB)
ISS 408	Autoscan 15 kHz to 100 kHz (RGB)
Vertical frequency	Autoscan 50 Hz to 100 Hz
Resolution range	Autoscan 720 x 525 to 1600 x 1200

Video processing

Decoder	9 bit digital
Digital sampling	24 bit, 8 bits per color; 13.5 MHz standard (video), 140 MHz standard (RGB)
Colors	16.78 million
Horizontal filtering	4 levels
Vertical filtering	8 levels

Video output

Number/signal type	2 scaled RGBHV, RGBS
Connectors	2 x 5 BNC female, (2) 15-pin HD female
Nominal level	0.7 Vp-p for RGB
Minimum/maximum levels	0 V to 0.7 Vp-p
Impedance	75 ohms
Scaled resolutions	
ISS 108	640x480[1,3,4,5], 800x600[1,3,4,5], 832x624[3,4,5], 848x480[3], 852x480[3], 1024x768[1,3,4,5]
ISS 408	640x480[1,3,4,6], 800x600[1,3,4,6], 832x624[3,4,6], 848x480[3,6], 852x480[3,6], 1024x768[1,3,4,5,6], 1280x768[2,6], 1280x1024[1,3], 1360x765[3,6], 1365x1024[3,6], 1400x1050[1,3,6], 576p[1,6], 720p[3,6], 1080p[3,6], 1080i[1,3,6] [1] = at 50 Hz [2] = at 56 Hz [3] = at 60 Hz [4] = at 75 Hz [5] = 85 Hz [6] = locked to the current input's vertical refresh rate (Accu-RATE Frame Lock)
Return loss	-30 dB @ 5 MHz
DC offset	±5 mV with input at 0 offset
Switching type	Seamless switching (cut or dissolve)

Sync

Input type	Autodetect RGBHV, RGBS, RGsB, RGBcvS
Output type	RGBHV, RGBS
Standards	NTSC 3.58, NTSC 4.43, PAL, SECAM
Input level	0 V to 5.0 Vp-p
Output level	0 V to 5.0 Vp-p
Input impedance	510 ohms
Output impedance	75 ohms
Max input voltage	5.0 Vp-p
Max. propagation delay	20 ns
Polarity	Positive or negative (selectable)

Audio

Gain	Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response	20 Hz to 20 kHz, ±0.05 dB
THD + Noise	0.03% @ 1 kHz at nominal level, 0 dB gain
S/N	>90 dB at maximum output (unweighted)

Crosstalk	<-80 dB @ 1 kHz, fully loaded
Stereo channel separation	>90 dB @ 1 kHz
CMRR	>75 dB @ 20 Hz to 20 kHz

Audio input

Number/signal type	8 stereo, balanced/unbalanced
Connectors	(8) 3.5 mm captive screw connectors, 5 pole
Impedance	>10k ohms unbalanced/balanced, DC coupled
Nominal level	+4 dBu (1.23 Vrms), -10 dBV (316 mVrms)
Maximum level	+19.5 dBu, (balanced or unbalanced) at 1%THD+N
Input gain adjustment	–24 dB to +9 dB, adjustable per input

NOTE *0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu.*

Audio output

Number/signal type	2 stereo, balanced/unbalanced
Connectors	(2) 3.5 mm captive screw connectors, 5 pole
Impedance	50 ohms unbalanced, 100 ohms balanced
Gain error	±0.1 dB channel to channel
Maximum level (Hi-Z)	>+21 dBu, balanced or unbalanced at 1%THD+N
Maximum level (600 ohm)	>+15 dBm, balanced or unbalanced at 1%THD+N

Control/remote — switcher

Serial control port	RS-232, 9-pin female D connector
Baud rate and protocol	9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configurations	2 = TX, 3 = RX, 5 = GND
Ethernet control port	1 RJ-45 female connector
Ethernet data rate	10/100Base-T, half/full duplex with autodetect
Ethernet protocol	ARP, ICMP (ping), TCP/IP, Telnet
Program control	Extron's control/configuration program for Windows® Extron's Simple Instruction Set (SIS™) Microsoft® Internet Explorer, Telnet

General

Power	100 VAC to 240 VAC, 50/60 Hz, 60 watts, internal, autoswitchable
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Rack mount	Yes
Enclosure type	Metal
Enclosure dimensions	5.25" H x 17.5" W x 11.2" D (3U high, full rack wide) 13.3 cm H x 44.5 cm W x 28.4 cm D (Depth excludes connectors and knobs. Width excludes rack ears.)
Product weight	11.2 lbs (5.1 kg)
Shipping weight	17 lbs (8 kg)
DIM weight	21 lbs
Vibration	ISTA 1A in carton (International Safe Transit Association)
Listings	UL, CUL
Compliances	CE, FCC Class B
MTBF	30,000 hours
Warranty	3 years parts and labor

NOTE *All nominal levels are at ±10%*

NOTE *Specifications are subject to change without notice.*

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